IEEE P802.11
Wireless LANs

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| Wireless Next Generation (WNG) Standing CommitteeMeeting Minutes for July-2019 MeetingVienna, Austria |
| Date: 07-19-2019 |
| Author(s): |
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Abstract

Meeting Minutes for the WNG SC meeting held in Vienna, Austria, in July 2019.

**WNG Session: July 16th, 2019, 8:00 AM to 10:00 AM Vienna Time**

Chair: Jim Lansford (Qualcomm)

Vice Chair & Secretary: Lei Wang (Futurewei)

**Meeting Agenda:**

The meeting agenda is shown below, and also published in the agenda document:

<https://mentor.ieee.org/802.11/dcn/19/11-19-0991-02-0wng-agenda-for-wng-sc-2019-july.ppt>

* Call Meeting to Order
* Agenda approval
* Attendance reminder
* Documentation reminder
* Announcements
* Approval of Previous meeting minutes
	+ Minutes from May WNG Meeting
		- <https://mentor.ieee.org/802.11/dcn/19/11-19-0892-00-0wng-wng-sc-meeting-minutes-2019-may-atlanta.docx>
* Presentations
	+ Tuesday 16 July 2019, 08:00 – 10:00
* Plans for September 2019
* Adjournment

**Meeting Minutes:**

* Chair called the meeting to order at 8:02am Vienna time on Tuesday, July 16th, 2019.
* Chair announced that a paper sign-up sheet will be passed around to record the attendance of this meeting, as the IEEE Attendance Tool is not working at this time and we will use the sign-up sheet as a back-up plan if the IEEE Attendance Tool cannot be fixed before this session ends.
* Agenda approval:

<https://mentor.ieee.org/802.11/dcn/19/11-19-0991-02-0wng-agenda-for-wng-sc-2019-july.ppt>

* The agenda was approved by unanimous consent
* Chair also noted the affiliation FAQ, anti-trust FAQ, ethics code, IEEE 802.11 policies and procedures, and IEEE 802 policies and procedures
* Chair covered the voting rules for WNG SC, being a standing committee
* Approval of previous meeting minutes
	+ Minutes from 2019-May WNG Meeting

<https://mentor.ieee.org/802.11/dcn/19/11-19-0892-00-0wng-wng-sc-meeting-minutes-2019-may-atlanta.docx>

* Approximately 120 people attended the WNG Session.
* Presentation #1: 11-19/1164r0 “Wi-Fi sensing” - Tony Xiao Han (Huawei)

<https://mentor.ieee.org/802.11/dcn/19/11-19-1164-00-0wng-wi-fi-sensing.pptx>

* + Summary of Discussion
		- The presenter voluntarily postponed his straw polls to after the 2nd presentation.
		- Discussed why further standardization work is needed for Wi-Fi sensing, considering there are some products on the market of Wi-Fi sensing for passive non-transceiver objects. The reasons mainly include: the current Wi-Fi is not designed for Wi-Fi sensing; need standards support to improve the performance; also, some standards changes could enable new applications to achieve the required QoS. It needs further study and discussions regarding what changes needed in MAC/PHY.
		- Questioned if any the technical feasibility study and measurement study have been done, and the responses were that some studies have been done internally and more studies are in progress, and plan to bring a contribution next time.
		- Discussed the considerations of different frequency bands for different purpose, e.g., mmWave bands could be good for targeting the use cases requiring high resolution sensing; and expect further study and discussions on this topic;
		- Commented that this work seems not associated with 802.11 WG, maybe belong to other IEEE groups.
		- Clarified that further studies are needed to identify the desired characteristics for Wi-Fi Sensing, and what can be offered by the current Wi-Fi.
* Presentation #2: 11-19/1293r0 “Wi-Fi Sensing: Usages, Requirements, Technical Feasibility, and Standards Gaps” – Claudio da Silva (Intel)

<https://mentor.ieee.org/802.11/dcn/19/11-19-1293-00-0wng-wi-fi-sensing-usages-requirements-technical-feasibility-and-standards-gaps.pptx>

* + Summary of Discussion
		- Clarified that the curves shown on slide 13 are just examples, and the two set of curves in the middle column diagrams are for the amplitude and phase of channel estimates, respectively.
		- Commented on the presentation only focuses on the channel estimate approach for Wi-Fi Sensing; and suggested to investigate other approaches, and potentially application-specific approaches.
		- Discussed the needs for standardization, e.g., when work with multiple devices, need to cooperate, to synchronize, and to negotiate; in addition, explore PHY data for upper layer applications, etc.
		- Questioned and discussed the mmWave bands vs. lower Wi-Fi bands for Wi-Fi sensing; interested in both; see values of different bands for different applications.
		- Commented that this topic does not fit into 802; all those things can be done somewhere else; and suggested to liaison to other groups to get the work done, as We/dot11 are very busy at lots of projects.
		- Discussed the measurement of the movement in different scenarios, e.g., moving away from or close to the device, or multiple people movement, etc.; the presenter indicated that more study is needed and may bring back further contributions.
* Straw Polls: WNG SC Chair, Jim, proposed friendly amended straw poll text for the two straw polls proposed in the 1st contribution by Tony Han; and Tony accepted the amended straw poll text as shown below.
	+ SP #1: do you think “Wi-Fi sensing” would be an interesting topic for 802.11 to Study?
		- Yes: 77
		- No: 0
		- Need more info: 27
		- Need to be done in another group: 2
		- No opinion: 0
	+ SP#2: what is your preference for the proper venue for future work/presentations for “Wi-Fi sensing” technologies?
		- Study Group (SG): 15
		- Topic Interest Group (TIG): 47
		- Continue the presentations in WNG before creating a TIG/SG: 75
		- No interested in further work/presentations in 802.11: 0
		- No opinion: 1
* Plan for 2019-September meeting:
	+ Call for contributions: the WNG chair will issue a call for contributions before the 2019-September meeting.
* Any other business: none
* Adjourned at 9:55am Vienna Time.